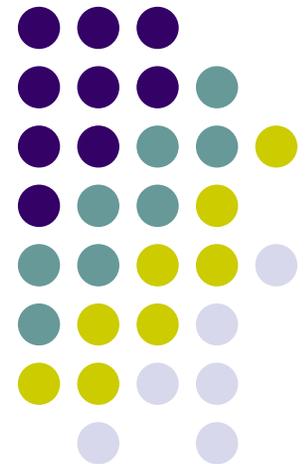


Acute Interventions in the Home Health Patient

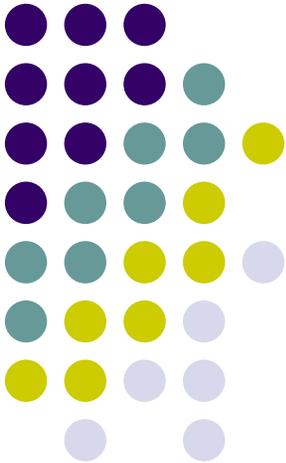


Acute Interventions in Home Health Patient



- Why do we need to know this stuff?
 - Increasing patient numbers
 - Managed care changes
 - Often not or under-insured
 - Often unable to care for self
 - Interaction with home care professionals

Patients and Problems



Types of Patients



- Airway pathologies
 - Inadequate secretion clearance
 - Inadequate alveolar oxygenation
 - Inadequate alveolar ventilation

Types of Patients

- Circulatory pathologies
 - Alterations in peripheral perfusion



Types of Patients



- GI/ GU pathologies
 - Feeding tubes
 - Ostomies
 - Catheters
 - Home dialysis

Types of Patients

- Infections
 - Cellulitis
 - Sepsis



Types of Patients



- Wound care
 - Surgical wound closure
 - Decubitus wounds
 - Drains

Types of Patients



- Hospice care
- Maternal/Child care
 - Apnea monitors
 - New parent



Types of Patients

- Progressive dementia
- Chronic pain management
 - TENS units
 - PCA units
- Home chemotherapy
- Transplant candidates

Problems Requiring EMS Intervention



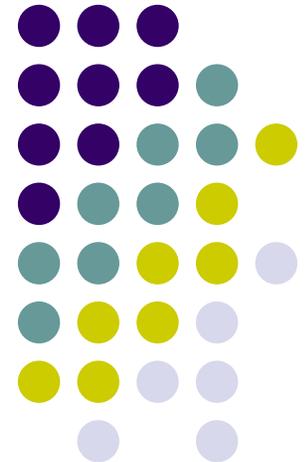
- Inadequate respiratory support
- Acute respiratory events
- Acute cardiac events
- Acute sepsis

Problems Requiring EMS Intervention



- GI/ GU crisis
- Equipment malfunction
- Other pathologies exacerbated in home care setting

Assessing the Home Health Patient





Assessment

- Scene size-up
 - Safety
 - Body substance isolation
 - Infectious waste
 - Pets
 - Firearms
 - Other home protection devices
 - Home hazards

Assessment



- Scene size-up
 - Outside help
 - Lifting and moving patient or devices
 - Expert management of patient or devices

Assessment



- Scene size-up
 - Significant Information
 - Ability to maintain healthy environment
 - Adequate nutritional support
 - Adequate basic needs (heat, electricity, etc.)



Assessment

- Initial assessment (Primary Survey)
 - Airway
 - Breathing
 - Circulation
 - Disability
 - Expose and examine

Identify and correct immediate life threats

Assessment



- Focused history and physical examination
 - Available home health history
 - Medication interactions
 - Compliance issues

Assessment



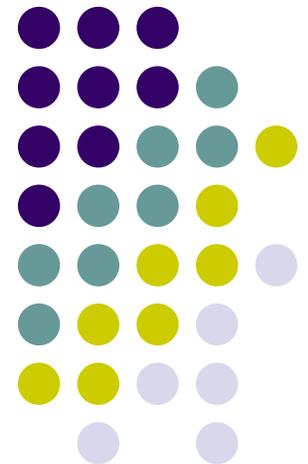
- Focused history and physical examination
 - Assessing dementia (acute vs. chronic)
 - Other intervention, transport considerations
 - Notification of family, caretakers
 - Securing home

Assessment



- On-going assessment
 - Comprehensive assessment
 - Inspection
 - Palpation
 - Auscultation
 - Differential diagnosis
 - Continued management

Management Considerations





Management Plan

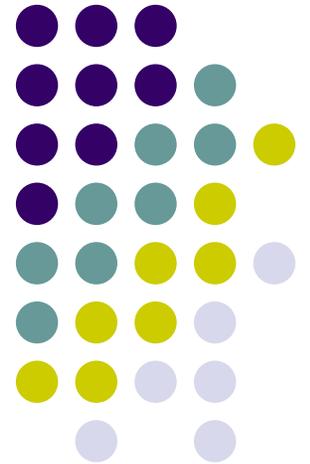
- Replacing home treatment modalities with ALS modalities
 - Airway, ventilatory support
 - Circulatory support
 - Pharmacological intervention
 - Non-pharmacologic interventions



Management Plan

- Transport considerations
 - Home care follow-up
 - Referral to other public service agencies
 - Notification of family medical doctor or home health agencies

Respiratory Support



Respiratory Support



- Pathologies
 - COPD
 - Bronchopulmonary dysplasia
 - Lung transplant candidates
 - Cystic fibrosis
 - Sleep apnea

Respiratory Support



- Oxygen therapy
 - Oxygen in cylinders
 - Liquid oxygen systems
 - Oxygen concentrators

Respiratory Support



- Artificial airways
 - Endotracheal tubes
 - Tracheotomies

Respiratory Support



- CPAP (Continuous Positive Airway Pressure)
 - Mask CPAP
 - Nasal CPAP
- BiPAP (Bilevel Positive Airway Pressure)

Respiratory Support



- Home ventilation
 - Positive pressure ventilation
 - Volume cycled
 - Pressure cycled
 - Negative pressure ventilation (poncho ventilators)

Respiratory Support



- Problems
 - Respiratory infections
 - Increased secretions
 - Obstructed or malfunctioning airway
 - Improper application of device

Respiratory Support



- Assessment findings
 - Work of breathing
 - Tidal volume
 - Peak flow
 - Oxygen saturation
 - Breath sounds

Respiratory Support



- Improving airway patency
 - Repositioning devices
 - Removing secretions
 - Replacing home device with ALS device
 - ET tube replacing tracheostomy tube

Respiratory Support



- Improving oxygenation
 - Replacing oxygen delivery devices
 - Changing flow rate of oxygen delivery devices

Respiratory Support



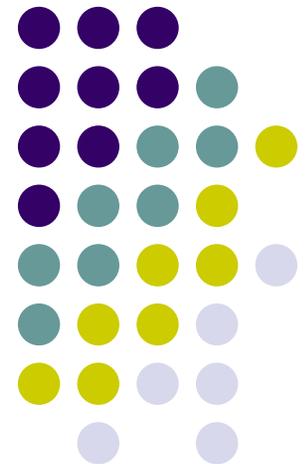
- Improving ventilation
 - Adjusting home care device's fit or settings
 - Removing home care device and using positive pressure ventilation

Respiratory Support



- Transport considerations
 - Psychological support
 - Communication strategies (Intubated patient)

Cardiovascular Support



Cardiovascular Support



- Pathologies
 - Cardiomyopathy
 - Congestive failure
 - Post MI cardiac insufficiency

Cardiovascular Support



- Vascular access devices
 - Surgically implanted medication delivery devices (Mediports, etc.)
 - Peripheral vascular access devices (PICC, Intracath, etc.)
 - Central vascular access devices (Hickman, Groshong, etc.)
 - Dialysis shunts

Cardiovascular Support



- Hemodynamic support
 - Pharmacological
 - Non-pharmacological
- Anticoagulant therapy

Cardiovascular Support



- Pathophysiology
 - Embolus formation associated with indwelling devices, stasis and inactivity
 - Air embolus associated with central venous access devices

Cardiovascular Support



- Problems
 - Obstructed, malfunctioning vascular access devices
 - Infected access site
 - Obstructed, clotted dialysis shunts

Cardiovascular Support



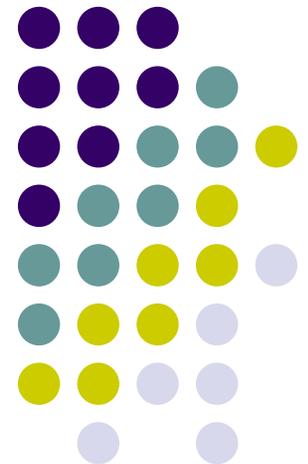
- Assessment findings
 - Hemodynamic compromise
 - Unstable angina
 - Hypoperfusion
 - Hemorrhage
 - Infection

Cardiovascular Support



- Assessment findings
 - Embolus
 - Air
 - Thrombus
 - Plastic or catheter tip

Genitourinary System



GU Crisis



- Urinary tract devices
 - External urinary catheters
 - Indwelling urinary catheters
 - Suprapubic catheters
 - Urostomy

GU Crisis

- Pathophysiology
 - Urosepsis
 - Urinary retention



GU Crisis



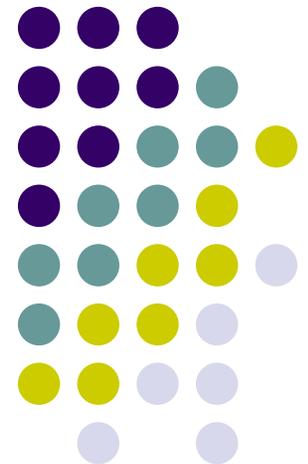
- Assessment findings
 - Pain
 - Distention of bladder
 - Color/ character/ amount of urine

GU Crisis



- Transport considerations
 - Positioning of patient
 - Positioning of devices for:
 - Proper drainage
 - Prevention of reflux

Gastrointestinal System



GI Crisis



- Gastric tract devices
 - NG tubes
 - Feeding tubes
 - Peg tubes, J tubes, etc.
 - Colostomy

GI Crisis



- Pathophysiology
 - Aspiration of gastric contents secondary to:
 - Non-patent gastric tube
 - Improper nutritional support via feeding tube
 - Patient positioning

GI Crisis



- Pathophysiology
 - Bowel obstruction in patient with gastric devices
 - Obstructed or malfunctioning gastric devices

GI Crisis



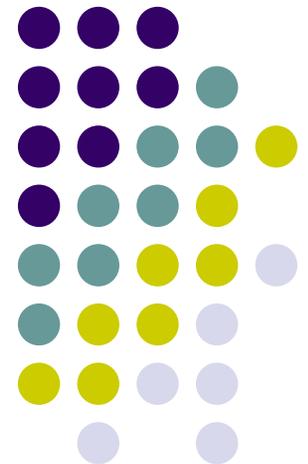
- Assessment findings
 - Abdominal pain
 - Bowel sounds

GI Crisis



- Transport considerations
 - Positioning of patient
 - Positioning of devices for:
 - Proper drainage
 - Prevention of reflux

Acute Infections



Acute Infections



- Medical therapy found in home setting
 - Open wounds
 - Dressings
 - Wound packing

Acute Infections



- Medical therapy found in home setting
 - Drains
 - Penrose drains
 - Jackson-Pratt drains

Acute Infections



- Medical therapy found in home setting
 - Wound closure techniques
 - Sutures
 - Wires
 - Staples

Acute Infections



- Pathophysiology
 - Immunocompromise
 - Poor peripheral perfusion
 - Sedentary existence/skin breakdown
 - Percutaneous/implanted medical devices

Acute Infections



- Pathophysiology
 - Open wounds, incisions
 - Poor nutrition, hygiene, ability to care for self
 - Abscesses
 - Cellulitis

Acute Infections



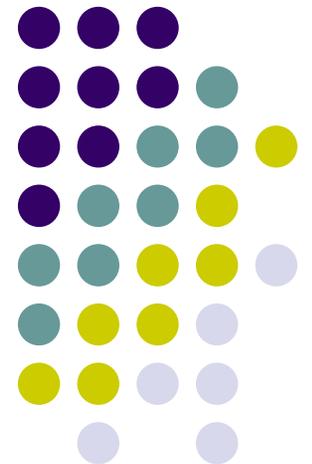
- Assessment findings
 - Healthy wound healing
 - Superficial infection
 - Major infection
 - Sepsis

Acute Infections



- Management
 - Sterile dressing (redressing) after wound evaluation

Maternal/Child



Maternal/Child



- Maternal Pathologies
 - Post partum hemorrhage
 - Post partum depression
 - Sepsis
 - Pulmonary embolus

Maternal/Child

- Infant Physiology
 - Thermoregulation
 - Respiratory drive
 - Immune response



Maternal/Child



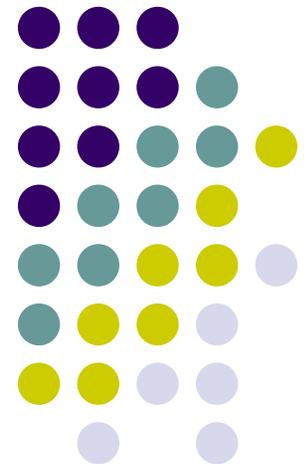
- Assessment findings
 - Signs of sepsis
 - Tachycardia
 - Tachypnea
 - Mottling of skin
 - Restlessness, irritability
 - Will not tolerate being held to shoulder

Maternal/Child



- Transport considerations
 - Psychological support
 - Communication strategies

Hospice/Comfort Care



Hospice/Comfort Care



- Definitions
 - Comfort care
 - Hospice care

Hospice/Comfort Care



- Medical therapy in home setting
 - Pain control
 - Therapy for overmedication

Hospice/Comfort Care



- Advanced Directives
 - DNR
 - Living will
 - Durable power of attorney

Hospice/Comfort Care



- Management
 - Transport considerations
 - Psychological support
 - Communication strategies

Hospice Comfort care



- Grief response
 - Denial
 - Anger
 - Bargaining
 - Depression
 - Acceptance